

Remarks

The present Amendment is submitted in response to the final Office Action dated December 11, 2008, which set a three-month period for response. Claims 1, 2, 4 and 5 are pending, where claims 3 and 6-9 are withdrawn. Claim 1, the sole pending independent claim, is amended to address a formal error, and claim 5 is amended to add the limitation that the external operating means comprises worm screw (100) and pinion (103), and is adapted for orthogonal mechanical coupling. Applicants respectfully request reconsideration of the application in view of these amendments and the following remarks.

Claims 1, 2 and 4 are rejected under 35 USC §103(a) as unpatentable over French reference No. 1,313,315 to Saint Gobain (Saint Gobain) in view of US Patent No. 1,274,768 to Petro (Petro), further in view of US Patent No. 3,185,473 to Myers, et al. (Meyers) and still further in view of US Patent No. 5,184,660 to Jelic (Jelic). Claim 5 is rejected under 35 USC §103(a) as unpatentable over Saint Gobain in view of Petro, Meyers, Jelic and further in view of US Patent No. 6,715,528 to Rossini (Rossini).

Applicant's independent claim 1 calls out a system for operating a blind (112) inside a chamber (5, 150) enclosed by panes (6, 7) surrounded by a frame (15), the frame comprising side hollow bars (20, 30, 35) connected by corner pieces (40, 50, 60). The system comprises a blind-roller (113) supported inside said chamber (5, 150), wherein a first end of the blind (112) is fixedly connected to the blind roller (113); a kinematic mechanism placed inside an oblong body

(65) fixed to a corner piece (60), wherein said mechanism includes three mutually engaged pinions (78, 79, 80), a first pinion (80) of which axially connected to the blind roller (113); and a first box (136) supported inside said chamber (5, 150) fixedly to a first end of the frame (15).

The blind (112) comprises first pulling means (153) supported inside said first box (136), the first pulling means including a helical spring (154) wound around a spring-roller (157) axially connected to a second pinion (78) of the kinematic mechanism by the interposition of an intermediate idle third pinion (79); and a second pulling means (173) operating in chamber (5, 150).

The second pulling means includes a mobile bar (120) fixedly connected to a second end (111) of the blind (112), a second box (184) supported inside the chamber (5, 150) fixedly to a second end of the frame (15) opposite to a first end of the frame, a cord (180) having one end fixed to a center of the mobile bar (120) and a second end fixed to a cord-roller (198) supported inside the second box (184), a first pin (217) axially engaged with both a first end of the cord-roller (198) and a shaft (104) of a rotating device (95, 138) disposed within the second box (184) and a threaded bushing (225) fixed to a second end of said cord roller (198) that screws into a threaded bar (224) fixed to the frame (15) for translating the cord roller (198) axially to accommodate turns (202) made by said cord (180).

While applicants agree that Saint Gobain discloses a blind system with a blind-roller supported inside a chamber and fixedly connected to a blind-roller, none of Saint Gobain, Petro, Meyers, Jelic or Rossini, disclose the kinematic

mechanism and said first and second pulling means, as claimed, and only Rossini discloses a chamber enclosed by panes surrounded by a frame. Applicants respectfully submit, therefore, that claims 1, 2, 4 and 5 are not obvious over the proposed combination of Saint Gobain, Petro, Meyers and Jenic, whether taken separately or in further combination with Rossini, for at least the following reasons.

Petro

Petro discloses a window screen that is readily attachable to a window frame, and which can be rolled when not in use and retained within a casing, and unrolled for use. Petro's window screen is controlled by a spring mounted adjacent to the roller so that it is readily accessible for repair or replacement.

While the Examiner asserts that Petro discloses the claimed kinematic mechanism, applicants respectfully disagree. Petro's pinions (11, 10) are aligned inside a cavity between brackets (13, 14), which does not include three (3) mutually engaged pinions in an oblong body fixed to a corner piece, as claimed. And while the Examiner asserts that Petro discloses first pulling means as claimed, applicants further disagree. Petro does not include that the second pinion is connected by the interposition of an intermediate idle third pinion, as claimed. Neither Saint Gobain nor Petro disclose a chamber (5, 150) enclosed by panes (6, 7) surrounded by a frame (15).

Meyers

Meyers discloses a prefabricated structure for controlling light passing through a large wall opening of a room. While Meyers does disclose second pulling means, Meyers second pulling means is not equivalent to applicants' second pulling means comprising a mobile bar fixedly connected to a second end of the blind. Meyers does not disclose a chamber (5, 150) enclosed by panes (6, 7) surrounded by a frame (15).

Jelic

Jelic discloses a device for raising and lowering a window blind fabric, i.e., a window blind activator with some of the features of the claimed second pulling means, but does not disclose the claimed second pulling means. Jelic discloses a hollow, cylindrical take-up tube (34) placed around threaded guide (32), with a threaded insert (36) fixed at one end. Take-up tube (34) has a tube plug (46) opposite threaded guide (32). Drive shaft (48) extends through a hole (50) on tube plug (46) into take-up tube (34). Drive shaft (48) is fixed to a drive core (58) by a cotter pin (68). As clutch (54) attached to pull cord (56) transmits force to rotate drive core (58), which rotates drive shaft (48).

Jelic does not disclose a second box (184) supported inside the chamber (5, 150) fixedly to a second end of frame (15), with a cord (180) with one end fixed to mobile bar (120) and a second end fixed to a cord roller (198) that is within the second box (184). That is, Jelic discloses only a single box with a

pulling mechanism on an upper portion of a frame, and does not disclose a second box and second pulling mechanism. Jelic does not disclose a chamber (5, 150) enclosed by panes (6, 7) surrounded by a frame (15). Nor is Jelic's cotter pin (64) axially engaged with a first end of roller (34) shaft (48), but only to one end of shaft (48) in the second box.

In determining the differences between the prior art and the claims, the question of obviousness under 35 USC §103(a) is not whether the differences themselves would have been obvious, but whether the claimed invention, i.e., the subject matter as a whole would have been obvious to the skilled artisan.

Applicants, therefore, disagree that it would have been obvious to include the kinematic mechanism as taught by Petro in order to allow Saint Gobain's spring (18) to be mounted adjacent to Saint Gobain's roller (4), as taught by Petro at col. 1, lines 23-28. Saint Gobain and Petro could not be combined because Saint Gobain requires its spring to be coaxial with its roller. Hence, the skilled artisan would not think to combine the two references.

Applicants do not agree it would have been obvious to include a third idle pinion between Petro's first and second pinions in view of St. Regis Paper Co. v. Bemis Co. As explained above, Petro does not include or suggest a third pinion of its kinematic mechanism because it is not constructed to function as is applicants' claimed kinematic mechanism. The determination to be made under section 103(a) is not whether a difference between three pinions and two pinions is significant, or patentably distinguishable, but whether the claimed system

including the kinematic mechanism including the three pinions, would have been obvious in view of the proposed combination including Petro, and Petro's kinematic mechanism adapted to operate with only two pinions..

Nor do applicants agree that it would have been obvious to have started with Saint Gobain and Petro, modify the proposed combination by the teachings of Meyers and realize the invention with second pulling means, as claimed. As mentioned above, Meyers' cord is not fixed to a mobile bar and a second end fixed to a cord roller in a second box, as claimed. Sheet (36) is wound about cylindrical roller 37 in casing (9).

For that matter, while the Examiner asserts that it would have been obvious to have combined St. Gobain and Petro with Meyers to include a second pulling means, applicants respectfully assert that they do not merely claim a second pulling means, but a second pulling means with all of the limitations set forth in the claim language. The Examiner acknowledges that Meyer's "second pulling means" is distinguishable, which is understood by applicants to be his reason for citing Jelic in addition to Meyers.

As mentioned above, Jelic's box and pulling means are adapted to operate as a top-mounted pulling means, for optimally sharing between clockwise and counterclockwise torques, either generated by the weight of the blinds in the raised position and the varying diameter springs (i.e., pre-torque means). Springs act between the friction brake (54) of endless pull cord (56) and drive shaft (48) connected to the take-up tube (34). Jelic's top-mounted

arrangement is understood to operate with blind roller, but only with collapsible blinds, such as Venetian or pleated blinds.

None of the four references disclose a chamber (5, 150) enclosed by panes (6, 7) and surrounded by a frame (15), into which the claimed kinematic mechanism and first and second pulling means are disposed.

Applicants, therefore, respectfully assert that it would not have been obvious to combine Jelic with the proposed combination of Saint Gobain, Petro and Meyers to include a second pulling means at the second end of the frame in order to move a blind up and down the frame, nor to adapt a second pulling means to include a cord fixed to a mobile bar to allow the tube to be rotated to a point where it can no longer travel longitudinally.

Withdrawal of the rejection of claim 1, and claims 2 and 4 that depend from claim 1, under 35 USC §103(a) over Saint Gobain in view of Petro, in view of Meyers and further in view of Jelic is respectfully requested.

Rossini

With respect to the separate rejection of claim 5, applicants respectfully assert that Rossini suffers the same shortcomings of Saint Gobain, Petro, Meyers and Jelic, so that claim 5 as amended is not obvious over the proposed combination.

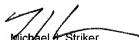
Moreover, Rossini teaches an actuation assembly for double glazing units including shutters moveable to be gathered or rolled in a sealed air space

therein, driven by a rotating device 10. Rotating device 10 includes a first external rotor 16 with a rotation axis 19 perpendicular to the double glazing unit 11. A second rotor 17 is inside the double glazing unit comprising a ring of permanent magnets 39 rigidly coupled to rotation shaft 18. The external rotor 16 includes magnets 20, which are actuated by a pull string 39. Rossini's magnetic rotating device achieves orthogonal magnetic coupling.

As amended, applicant's claim 5 now limits the external operating means as comprising worm screw (100) and pinion (103) and adapted for orthogonal mechanical coupling. Applicant's claimed external operating means that is adapted orthogonal mechanical coupling is readily distinguishable from Rossini magnetic rotating device adapted for orthogonal magnetic coupling. Hence claim 5 is not obvious under section 103(a) by Saint Gobain, Petro, Meyers, Jelic and Rossini, and applicants respectfully request withdrawal of same.

Accordingly, the application as amended is believed to be in condition for allowance. Action to this end is courteously solicited. However, should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application in condition for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'MS', with a long horizontal flourish extending to the right.

Michael G. Striker
Attorney for Applicant(s)
Reg. No. 27,233
103 East Neck Road
Huntington, New York 11743
631 549 4700